



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/541,198

07/05/2005

Ki-Yong You

87408.2000

6213

30734

7590

03/09/2009

BAKER & HOSTETLER LLP
WASHINGTON SQUARE, SUITE 1100
1050 CONNECTICUT AVE. N.W.
WASHINGTON, DC 20036-5304

EXAMINER

HEINRICH, SAMUEL M

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

03/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,198	Applicant(s) YOU ET AL.	
	Examiner Samuel M. Heinrich	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claim 12 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 12 is a method of manufacturing glass plate. The originally presented claims are apparatus claims which can be used for different processes such as ceramics processing. The originally presented claims require a cracking unit which is not required in the method claim.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, last paragraph, is the "first cooling part disposed at the rear of the first carbon dioxide laser beam irradiation part" the same as the earlier described "first cooling part"? This is not a clear description.

Claims 2-9 contain the unclear description of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,744,009 to Xuan et al in view of US20040036974A1 to Slatkine.

Xuan et al describe (e.g., Figure 7) a CO₂ scribing beam, water/air cooling spray, and a breaking beam.

Slatkine describes [0055] irradiation spot size from 1 to 20 mm. Slatkine describes [0129] irradiation energy density. Slatkine describes [0153] etching glass with a laser.

The instant claimed arrangement is well known as described by Xuan et al. The use of the particular irradiation in Xuan et al would have been obvious at the time

Art Unit: 3742

applicant's invention was made to a person having ordinary skill in the art because Slatkine describes application of similar energy and because it provides suitable power for processing particular workpieces.

Note, method limitations may not impart patentability to apparatus claims.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR20020009070 in view of US20040036974A1 to Slatkine.

KR20020009070 shows (e.g., Figures 1 and 2) cracking unit (2 and 12), irradiation spot (4 and 14), and quencher (5 and 15). The laser is a CO2 laser.

Slatkine describes [0055] irradiation spot size from 1 to 20 mm. Slatkine describes [0129] irradiation energy density. Slatkine describes [0153] etching glass with a laser.

The instant claimed arrangement is well known as described by KR20020009070. The use of the particular irradiation in KR20020009070 would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because Slatkine describes application of similar energy and because it provides suitable power for processing particular workpieces.

Note, method limitations may not impart patentability to apparatus claims.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,744,009 to Xuan et al in view of US20040036974A1 to Slatkine as applied to claim 2 above, and further in view of USPN 6,489,588 to Hoekstra et al.

Hoekstra et al describe (column 6, lines 16+) well known computer control for movement and the use thereof would have been obvious at the time applicant's

Art Unit: 3742

invention was made to a person having ordinary skill in the art because it provides for operation with different workpieces.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR20020009070 in view of US20040036974A1 to Slatkine as applied to claim 2 above, and further in view of USPN 6,489,588 to Hoekstra et al.

Hoekstra et al describe (column 6, lines 16+) well known computer control for movement and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides for operation with different workpieces.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,744,009 to Xuan et al in view of US20040036974A1 to Slatkine as applied to claim 1 above, and further in view of US20030052098A1 to Kim et al.

Kim et al describe [0012] well known "coolant sucking device" and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides a clean area for application of energy.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over KR20020009070 in view of US20040036974A1 to Slatkine as applied to claim 1 above, and further in view of US20030052098A1 to Kim et al.

Kim et al describe [0012] well known "coolant sucking device" and the use thereof would have been obvious at the time applicant's invention was made to a

Art Unit: 3742

person having ordinary skill in the art because it provides a clean area for application of energy.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/
Primary Examiner, Art Unit 3742